# DEPARTMENT OF PESTICIDE REGULATION

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The mission of the Department of Pesticide Regulation is to protect human health and the environment by regulating pesticide sales and use, and by fostering reduced-risk pest management.

## Protecting California's Water, Air, Food, and Land

Cal/EPA Goal 1: Air that is healthy to breath, sustains and improves our ecosystems, and cultural resources.

**Cal/EPA Goal 2**: Rivers, lakes, estuaries, and marine waters that are fishable, swimmable, support healthy ecosystems and other beneficial uses.

Cal/EPA Goal 3: Groundwater that is safe for drinking and other beneficial uses.

**DPR Strategic Plan Goal 1**: Assure that the quality of California's water, air, food, and land resources is not adversely affected by pesticides.

Pesticides may adversely impact our environment. Protecting our environment from the use of pesticides is an expected outcome of the pesticide regulatory program. This outcome is driven by sound science and adequate data as part of a process for thorough, timely, and ongoing evaluations.

#### **Accomplishments**

- 1. **Propanil Use Evaluation**: Preliminary restrictions, in the form of recommended permit conditions, were developed and a pilot program was initiated for the 2002 propanil use season on rice. Propanil use has been found to damage adjacent crops. Analysis of previously collected use monitoring data is ongoing. DPR will assess the future direction of the propanil program based on the results of the 2002 use season and develop final recommendations for regulatory changes. The ground and air application permit conditions were issued to the county agricultural commissioners (CAC) in an April letter entitled "Rice Pesticides Program for 2002." A copy is available on DPR's Web site at <a href="www.cdpr.ca.gov/docs/enfcmpli/penfltrs/penf2002/2002012.htm">www.cdpr.ca.gov/docs/enfcmpli/penfltrs/penf2002/2002012.htm</a>
- 2. Clopyralid and Compost: DPR initiated cancellation action on 15 landscape maintenance products containing the herbicide clopyralid for use on residential lawns. This action was intended to reduce or eliminate the occurrence of potentially phytotoxic clopyralid (an herbicide used to control yellow starthistle and other weeds) residues in compost made from residential grass clippings. DPR believed there was no way to control homeowners' decisions to recycle grass clippings where clopyralid products had been used. Products for agricultural uses were not affected by this cancellation action since these uses do not contribute significantly to the compost stream. DPR and the California Integrated Waste Management Board (CIWMB) initiated a series of stakeholders' meetings in May. These meetings were intended to bring together composters, clopyralid users, and others to gain more information

about use of the herbicide. Stakeholders received more information about compost feedstocks and about educational efforts to warn users about potential contamination of compost.

#### **Priorities**

- 1. **Chemigation Initiative**: DPR will continue to educate State and county enforcement staff and pesticide users about label requirements to protect the environment when adding pesticides to irrigation water (chemigation). DPR will review recommendations made by the Chemigation Task Force (comprised of representatives from the agricultural industry); continue training sessions targeting growers, pest control applicators, and irrigation dealers; and develop Web pages describing chemigation safety device requirements.
- 2. Surface Water Program: DPR's environmental monitoring branch will finalize the surface water policy between DPR and the State Water Resources Control Board, and the protocol and report on surface water modeling on correlation of detections with pesticide use and rainfall. DPR will complete the surface water network recommendation, initiate implementation of dormant spray runoff mitigation/outreach, and initiate an urban pesticide runoff prevention strategy.
- 3. Clopyralid and Compost: By January 2003, DPR will complete its cancellation actions on clopyralid products, removing references to use on residential lawns from product labels. DPR and CIWMB will hold four stakeholders meetings and will have an improved understanding of clopyralid uses that may affect compost. DPR and CIWMB will initiate consultation with the U.S. EPA to develop tests to assess the fate of herbicides in the composting environment.
- 4. Propanil Regulations: Propanil is an herbicide used to control weeds (watergrass) in rice fields. For more than 30 years, the rice counties in the northern Sacramento Valley have had limited or no use of this material due to its potential to adversely affect nontarget crops, primarily prunes. DPR began an evaluation on the limited use of this material in 1998 to ensure it could be used without significant damage to nontarget crops. DPR plans to file rulemaking amendments to the propanil regulations to be in place for the start of the 2003 propanil use season.

# Protecting Human Health

**Cal/EPA Goal 4**: Communities that are free from unacceptable human health and ecological risks due to exposure from hazardous substances and other potential harmful agents.

**DPR Strategic Plan Goal 2**: Assure that people, especially workers and sensitive populations, are protected from unacceptable pesticide risks.

The use of pesticides may adversely impact human health. Workers and sensitive populations such as children are at a greater risk. Protecting people from unacceptable pesticide risks is an expected outcome of the pesticide regulatory program. This outcome is driven by sound science and adequate data as part of a process for thorough, timely, and ongoing evaluations.

#### **Accomplishments**

1. School Integrated Pest Management Program: DPR developed and distributed a pesticide use reporting form for licensed pest control businesses working in schools. In January, DPR published an independent Web site for the school integrated pest management (IPM) program to provide information related to pesticide use and IPM policies, programs, and practices. Recently DPR added environmental and human health information to the Web site. DPR contacted all school districts and identified about 400 IPM coordinators, including those interested in upcoming training. DPR developed an IPM train-the-trainer program and conducted a pilot training session on June 19. In June, DPR completed its first edition of the IPM Model Program Guidebook, available at <a href="https://www.schoolipm.info/">www.schoolipm.info/</a>.

To promote and facilitate the adoption of IPM, staff made eight presentations to target audiences that included maintenance and operations directors, risk managers, CAC staff, pest control operators, pest control applicators, growers, scientists, policy makers, and teachers. Staff also completed a "frequently asked questions" document and professionally formatted and printed a program overview. DPR contributed a chapter to the Cal/EPA Report to the Legislature on children's environmental health and staffed a booth at the Cal/EPA annual symposium. The school IPM program conducted a survey of school district IPM policies, programs, and practices, and will finalize a report of the survey results. Staff submitted an article to the *Journal of School Business*, which will be published later this year.

- 2. **Licensing**: DPR processed 12,515 pest control business and individual renewal applications during the first quarter of 2002. Examinations were also conducted. Staff issued 838 certificates and licenses to new applicants, and 160 licenses to pest control businesses. DPR made some minor changes to the licensing database to improve its efficiency and incorporate new technology. A project was completed to fully document the licensing database. An email address on the licensing Web site was created to provide a new way for staff to interact with DPR stakeholders and clients. DPR is currently seeking U.S. EPA discretionary funds for a project to develop a laws and regulations examination, maintenance gardener pest control examination questions, and a maintenance gardener study guide.
- 3. **Preventing Pesticide Illness**: On March 8, DPR released the 2000 annual pesticide-related illness and injury report. During 2000, DPR received reports of 1,144 people whose health may have been affected by pesticide exposure. After investigation, DPR scientists found that pesticide exposure had been at least a possible contributing factor in 893 of the cases. The 1,144 total cases investigated in the year 2000 represent a decrease of 485 (30 percent) from 1999, when 1,629 cases were investigated. There was a decrease of 308 (26 percent) pesticide-related cases in 2000 (893 cases) compared to 1999 (1,201 cases). A distinct downward trend over the past decade is apparent for all pesticide categories, all areas of the state, all activities, and both agricultural and other use scenarios.

This trend is limited, however, to occupational exposures, and corresponds to a drop in retrievals of doctors' reports forwarded to the Department of Industrial Relations by workers' compensation claims payers. The decrease in doctors' reports has been partially compensated

- by reporting through poison control centers and, for agricultural exposures only, by an increase in the number of cases identified independently of formal notification systems.
- 4. **Risk Assessments**: DPR completed risk assessments for two chemicals under the requirements of AB 1807 (Chapter 1047, Statutes of 1983)—methyl isothiocyanate and azinphos-methyl. DPR also completed risk assessments for methyl bromide (inhalation route and dietary route) under the requirements of SB 950 (Chapter 669, Statutes of 1984). Several assessments were sent to U.S. EPA and the Office of Environmental Health Hazard Assessment (OEHHA) for peer review: methyl bromide (aggregate inhalation and dietary routes), azinphos-methyl, methyl isothiocyanate, and metam sodium (all under SB 950 requirements).
- 5. **Registration Process**: DPR's pesticide registration branch completed the review of nine new reduced-risk pesticides in 2002. In addition, the pesticide registration branch has completed review of seven other active ingredients.
- 6. Compliance Improvement: Using the existing overview inspection program, DPR's compliance work group has developed a program to reevaluate industry compliance levels in selected counties previously assessed. The program will determine how the implemented improvements are working, as well as the effect the program changes had on industry compliance levels. The data from this compliance assessment oversight inspection program will be analyzed and compared to the results of the original compliance assessments for each county that is reevaluated. Data from the inspection forms will be entered into the county pesticide compliance and assessment database. This database can be used to set baseline compliance levels for continuous program evaluations by DPR, as well as assist CACs in developing negotiated work plans and setting local program priorities.
- 7. **Residue Programs Business Process Evaluation**: DPR's enforcement branch has completed an evaluation of the feasibility of integrating some of the produce sampling and data collection activities of the State-mandated Pesticide Residue Surveillance program and the U.S. Department of Agriculture's Pesticide Data program. The business process evaluation has been completed, with recommendations submitted in four areas: adopt electronic clipboard technology, automate and integrate the site selection of programs, enhance the residue database, and move the integrated programs to shared intranet Web pages. An integration pilot project is being prioritized as part of the enforcement branch operational plan for fiscal year 2002–03.
- 8. **Residue Reduction Project**: In April, DPR provided presentations for a biocontrol and pesticide issues workshop co-hosted by the Departments of Agriculture of both California and Baja California Norte in Ensenada, Mexico. DPR discussed information with Mexican growers about illegal pesticide residues found by DPR on produce grown in Mexico. DPR also provided instruction to the growers about pest control practices to avoid illegal pesticide residues on crops. The goal of this project is to reduce the number of Mexican produce shipments containing illegal pesticide residues.

#### **Priorities**

- 1. School IPM Program: DPR staff will revise the school IPM training program based on results from the pilot program, and will then conduct training sessions statewide. DPR will finalize and distribute its report on the survey results. DPR will seek program improvement through key school organizations and other stakeholders via the school IPM advisory group. Staff will make presentations to targeted audiences to promote and facilitate adoption of an IPM program by school districts. DPR plans to write and submit several more articles on IPM topics to appropriate journals for publication.
- 2. **Risk Assessments**: DPR expects to complete risk assessments for metam sodium, methyl isothiocyanate, azinphos-methyl, and methyl bromide (cumulative exposure assessment under SB 950 requirements). DPR also expects to send several assessments to U.S. EPA and OEHHA for peer review: endosulfan, methyl parathion, hydramethylon, and ortho phenyl phenol.
- 3. Pesticide Episode Response Plan Revision: The Pesticide Episode Response Plan was developed in 1998. The response plan establishes a system for exchanging data between DPR, the San Diego and Imperial CACs, and their counterpart Mexican agencies. The plan provides for coordinated response to pesticide incidents that occur in the border area. DPR expects to receive funds from U.S. EPA that will allow DPR to contract with the San Diego and Imperial CACs to update contact information and to perform mock episode exercises in San Diego and Imperial counties.
- 4. Metam-Sodium Permit Guidance: DPR plans to complete a metam-sodium risk management directive by July. DPR will allow a 30-day comment period, which includes consultation with OEHHA, the Air Resources Board, and CACs. In October, DPR will recommend mitigations that may be implemented as regulations, label amendments, or permit conditions. Strategies to reduce metam-sodium exposure may be similar to those used for methyl bromide. Strategies include buffer zones, application methods, tarps, acreage limits, and incremental irrigation practices, all of which incorporate a balance of enforceability and feasibility. DPR will continue to meet with interested stakeholders.
- 5. Exposure Monitoring Studies: DPR conducts monitoring studies to estimate exposures to workers. From 1997 to 2001, DPR scientists collected foliage samples from various crops to determine the level of pesticide residues at the expiration of a restricted-entry interval. A restricted-entry interval is the time period when a worker is prohibited from entering a treated field to perform cultivation activities. The information collected in this study is used to evaluate pesticides and prepare risk assessments. DPR anticipates releasing its report in November.
- 6. **Pesticide Illness Surveillance Program Improvements**. DPR maintains a compilation of data on pesticide-related illnesses recorded in California. The data are summarized in tables and the findings are released to the public. DPR is in the process of reviewing and improving the Pesticide Illness Surveillance Program data validation process, thereby ensuring accurate reporting of illness data, and preparing the database for availability to DPR stakeholders on

the Internet. DPR anticipates completing enhancements on data validation procedures by December.

## Advancing Pest Management Systems

Cal/EPA Goal 7: Continuous improvement and application of science and technology.

Cal/EPA Goal 8: An efficient and effective Cal/EPA in pursuit of its mission.

**DPR Strategic Plan Goal 3**: Advance the development and adoption of pest management systems that reduce risks to people and the environment.

Promoting the adoption of reduced-risk pest management strategies is a key element of DPR's mission and its pollution prevention efforts.

#### **Accomplishments**

- 1. Reduced-Risk Pest Management Program: DPR awarded 11 pest management grants and 8 pest management alliance grant contracts totaling approximately \$973,000. DPR also awarded three evaluations for approximately \$10,000. In March, DPR held a Pest Management Alliance update workshop where project leaders provided information about the successes of their projects to DPR staff and those who will respond to future requests for proposals. In late 2001, DPR recognized nine IPM innovators.
- 2. **Pesticide Use Trends**: In October 2001, DPR published the preliminary 2000 Summary of Pesticide Use Reports by Chemical and Commodity. The summary is available on DPR's Web site at <a href="www.cdpr.ca.gov/docs/pur/pur00rep/00\_pur.htm">www.cdpr.ca.gov/docs/pur/pur00rep/00\_pur.htm</a>. As part of the executive summary section of those reports, DPR included an analysis of pesticide use trends for the years 1992–2000 at <a href="www.cdpr.ca.gov/docs/pur/pur97rep/pur\_anal.htm">www.cdpr.ca.gov/docs/pur/pur97rep/pur\_anal.htm</a>. Early in 2002, DPR released a report on pesticide use report data quality.

#### **Priorities**

- 1. Pest Management Grants: Along with the Pest Management Advisory Committee, DPR will address the recommendations provided by its consultant, the Center for Agricultural Partnerships, as it makes changes to its pest management grants program. DPR will send its request for proposals, receive proposals, and work with the pest management advisory committee to award three or four alliance contracts for fiscal year 2002–03. DPR staff will continue to manage 11 grants and 8 alliance projects.
- 2. **IPM Innovators**: DPR's IPM innovator awards recognize California organizations that pioneer problem-solving approaches to pest control that use least toxic methods to increase the benefits and reduce the risks of pest management. DPR recognizes select groups for their inspiration and determination in pursuing new systems of pest control and applauds their efforts to share their experiences with others. DPR, through a process of solicitation for nominations, gathering information on candidates, and screening of the candidates by CACs

and Cal/EPA's boards, departments, and offices, will select IPM innovator candidates to receive awards at a ceremony in October.

## **Ensuring Environmental Justice**

**Cal/EPA Goal 5**: Reduce or eliminate the disproportionate impacts of pollution on low-income and minority populations.

**DPR Strategic Plan Goals 2 and 5**: Build good relationships through extensive outreach, communication, and improved responsiveness.

**DPR Strategic Plan Goal 6**: Improve the delivery of our programs through securing adequate resources, improving business processes, maintaining a strong workforce, and employing egovernment solutions.

A strong enforcement program is the cornerstone of improving the pesticide regulatory program and ensuring equal treatment under the law. All of DPR's activities must enhance opportunities for people to have access to and participate in its processes.

#### Accomplishments

- 1. **Protection of Farmworkers**: DPR is currently evaluating the notification and hazard communication requirements in Title 3, California Code of Regulations. Growers and farm labor contractors are required to inform their employees of pesticide applications that will occur on or near the work site. Growers and farm labor contractors must also make pesticide exposure information available to their employees. A report will be available by July.
- 2. Permit Pilot Project with Counties: A consultant was hired to review the current restricted materials permit program used at CAC offices for a possible replacement program called the State Permit and Use Report System. The consultant presented the process required for information technology projects including documentation, review, and approval procedures to CACs. Technical and business-case surveys were sent to CACs. All information will be used for a prefeasibility study report document. If approved, a feasibility study report and budget change proposal will be developed.
- 3. County Permit and Use Reporting: DPR has continued in the support of geographic information systems development at the county level. Deployment of the Kern County geographic information systems (GIS) programs as a pilot basis in counties just beginning to develop their GIS capabilities and field border databases is ongoing. DPR received a preliminary copy of the application from Kern County in May, and is now preparing documentation to support new users. Deployment to pilot counties will take place before the end of 2002.

#### **Priorities**

1. **Environmental Justice Policy**: DPR and the CACs have adopted mission statements and goals that reflect their commitment to ensuring environmental justice. By December, DPR

- will develop, solicit comments on, and adopt a formal statement of its environmental justice policy.
- 2. Indian Health Care: In 1997, DPR held a series of community meetings with Indians in northern California. Indian groups, particularly the California Indian Basketweavers Association, had been expressing concern that Indians were being adversely affected by exposure to pesticides when gathering plant materials for basketry, food, or sacred uses. The meetings provided a forum to discuss these issues and make recommendations for resolving them. One of the concerns was that illnesses were being underreported because health care providers who regularly treat Indians may not be familiar the symptoms of pesticide-related illnesses. To address this issue, DPR contracted with the UC Davis to develop an Internet-based training program for Indian health care providers. Program development has been completed and certified for continuing education credits. The university will post the program available on its Web site.

## Continuously Improving Performance

Cal/EPA Goals 7 and 8

#### DPR Strategic Plan Goals 5 and 6

The strength of DPR's program comes from its staff. Long-term, stable funding will be imperative to fulfilling our mandates. The proliferation of data and the maturing electronic information age have dramatically increased the opportunities to improve our processes and provide greater access to our data.

### Accomplishments

- 1. **Online County Registration for Pest Control Licensees**: The pilot project in six counties to allow pest control operators to register online was completed by July. The feedback from the business community has been very favorable.
- 2. Pesticide Residues on Fresh Produce Data Web Page: In December 2001, DPR pesticide residue data (beginning with 1986) was made available to the public on the DPR Web site at <a href="https://www.cdpr.ca.gov/docs/pstrsmon/rsmonmnu.htm">www.cdpr.ca.gov/docs/pstrsmon/rsmonmnu.htm</a> data. A summary report for the 1998–2000 fresh produce data was added to the site in March. The report may be accessed at <a href="https://www.cdpr.ca.gov/docs/dprdocs/residue/resi1998/rsfr1998.htm">www.cdpr.ca.gov/docs/dprdocs/residue/resi1998/rsfr1998.htm</a>. The data meet the criteria specified in Food and Agricultural Code sections 12532(a), (c), (d), and (e).
- 3. Registration Process: DPR's pesticide registration branch has developed an application tracking system that electronically sends information to registrants regarding the progress of each application as it moves through the registration process. Each transaction triggers an email message detailing the latest activity on the submission and creates customized links to online instructions and regulatory materials. In addition, the pesticide registration branch has developed a new Web-based management system for the pesticide data index to replace an aging proprietary application. The new system provides better internal access and reporting

- capabilities. The applications development phase has been completed for both of these projects and they will be implemented as part of DPR's server consolidation project.
- 4. Government-to-Business Web Site: Working directly with the Department of General Services' (DGS) e-business office and the vendor, DPR made the decision in February to expand its online county registration licensing pilot project to include San Joaquin, Merced, Madera, Fresno, Kings, Tulare, and Kern counties to the original pilot, for a total of 13 counties. This expansion results in continuous coverage from Contra Costa County to Los Angeles County. This coverage also enables pest control businesses, advisers, and pilots to review their license and compliance information maintained by DPR, obtain statewide county registration information, and submit registration information to participating counties.

Licensed pilots and agricultural aviation businesses register annually with the agricultural commissioner in each county where they do business. Businesses and pilots can now use the online service to submit their county registration information. This Web-based system gives businesses and pilots an easy way to electronically submit their registration information. This is critical to improving the overall quality, timeliness, and efficiency of registering in geographically disparate counties.

#### **Priorities**

- 1. Pesticide Use Trends: DPR will complete a detailed trend analysis of organophosphate use on almonds over the last nine years and examine alternate methods of pest control for overwintering pests. This analysis will help us evaluate the success of some of the projects funded by our pest management alliances and grants program. DPR will also start an analysis of pesticide use on another major crop (to be determined at a later date). The University of California contractor will provide progress reports on its development of a model survey. The survey will identify factors that affect growers' decisions to use IPM practices. DPR will release the 2001 pesticide use reports and a trends analysis. Enforcement and pest management and licensing branch staff will continue working with information technology branch staff on development of the pesticide use report component of a departmental data warehouse for data queries.
- 2. Compliance Assessment and Improvement: DPR plans to begin implementation of a compliance assessment oversight inspections program by re-measuring industry compliance levels in four counties that had been previously identified with low levels of compliance for worker protection requirements. Additionally, DPR and the CACs will be testing revised inspection procedures intended to improve compliance. On an ongoing basis, data will be collected from all CAC inspection forms to be analyzed and used for future performance goals and resource allocation.
- 3. **U.S. EPA Work Share Project**: DPR's pesticide registration activities continued to partner with U.S. EPA on sharing data reviews. DPR expects to complete two more residue review packages by September 30 to fulfill its 2002 federal fiscal year commitment. On October 1

(the beginning of the 2003 federal fiscal year), DPR will start with a new work plan. DPR's standard annual commitment has been 25 pesticide/crop combinations.

- 4. **Online County Registration for Pest Control Licensees**: DPR and the DGS e-government office will conduct training for CACs in the pilot counties. DPR and DGS plan to expand the project to more counties in 2003.
- 5. **I-License (Online License Renewal)**: DPR will work with the DGS e-business office to assess DPR's readiness to deploy an online license renewal initiative (i-license). This new application would allow a licensee to log on, view and update contact information, view current licenses and certificates held, indicate which licenses and certificates are or are not to be renewed, calculate the total fee, and pay the fee. If required, the online form will require the applicant to enter continuing education course names, numbers, dates, and hours.

The DGS e-business office will provide the platform for license renewal through the California portal project. DPR will retain an existing back-office database now used to manage pest control licensees. This project will include the assessment of DPR's ability to develop linkages between the front-end license renewal forms and the back-office database. The key objectives are to reduce the time for preparation, submission, and processing of renewal applications for approximately 26,400 licensees; and to actually issue renewed licenses or certificates. With the caveat that budget and resource limitations may hinder our efforts, DPR will continue communication with the DGS e-business office during the remainder of 2002. This will ensure DPR's licensing renewal requirements are incorporated into this additional online licensing renewal process through the California portal project.

#### STATE OF CALIFORNIA

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